FIG. 1

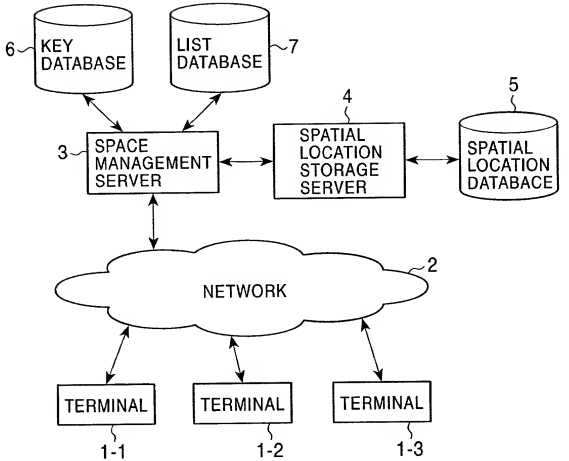

6
KEY DATABASE
LIST DATABASE
7
4
5
3
SPACE MANAGEMENT SERVER
SPATIAL LOCATION STORAGE SERVER
SPATIAL LOCATION DATABACE
2
NETWORK
TERMINAL
TERMINAL
TERMINAL
1-1
1-2
1-3

FIG. 2

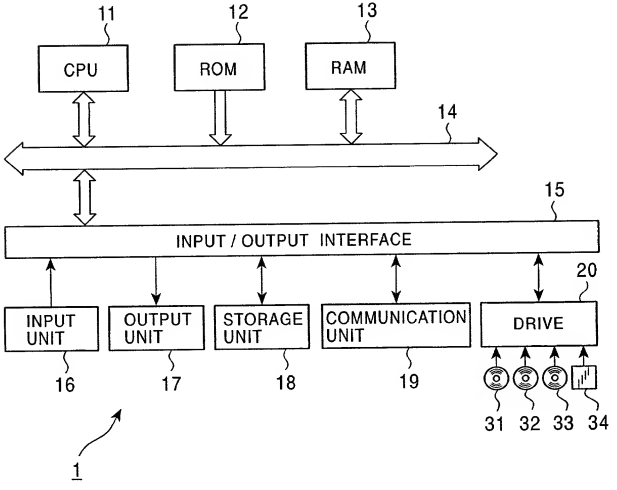
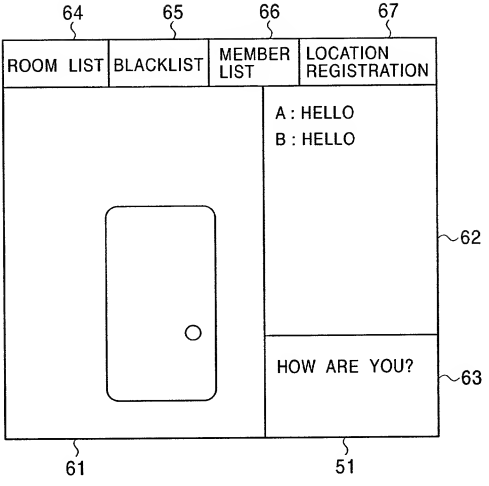

11
12
13
CPU
ROM
RAM
14
15
INPUT / OUTPUT INTERFACE
20
INPUT UNIT
OUTPUT UNIT
STORAGE UNIT
COMMUNICATION UNIT
DRIVE
16
17
18
19
31
32
33
34
1

FIG. 3



10015514 2020041

FIG. 4

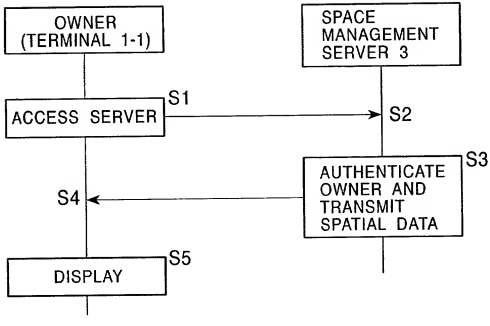

OWNER
(TERMINAL 1-1)
SPACE
MANAGEMENT
SERVER 3
ACCESS SERVER
S1
S2
AUTHENTICATE
OWNER AND
TRANSMIT
SPATIAL DATA
S3
S4
DISPLAY
S5

FIG. 5

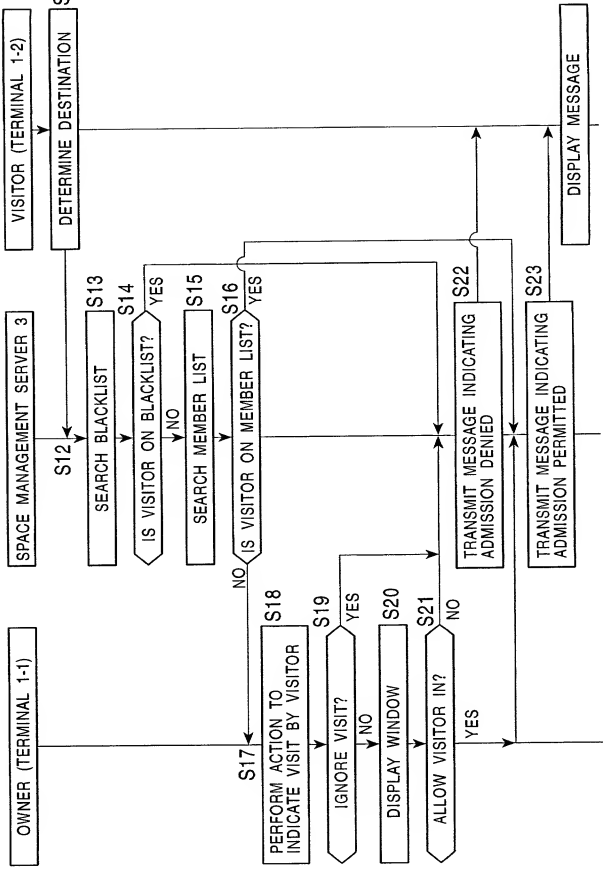

OWNER (TERMINAL 1-1)
SPACE MANAGEMENT SERVER 3
VISITOR (TERMINAL 1-2)
S11
DETERMINE DESTINATION
S12
SEARCH BLACKLIST
S13
IS VISITOR ON BLACKLIST?
S14
YES
NO
SEARCH MEMBER LIST
S15
IS VISITOR ON MEMBER LIST?
S16
YES
NO
S17
PERFORM ACTION TO INDICATE VISIT BY VISITOR
S18
IGNORE VISIT?
S19
YES
NO
DISPLAY WINDOW
S20
ALLOW VISITOR IN?
S21
NO
YES
TRANSMIT MESSAGE INDICATING ADMISSION DENIED
S22
TRANSMIT MESSAGE INDICATING ADMISSION PERMITTED
S23
DISPLAY MESSAGE
S24

FIG. 6

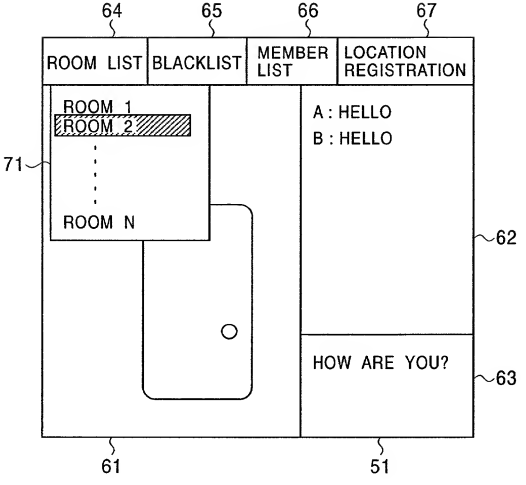

64
65
66
67
ROOM LIST
BLACKLIST
MEMBER LIST
LOCATION REGISTRATION
ROOM 1
ROOM 2
ROOM N
71
A : HELLO
B : HELLO
62
HOW ARE YOU?
63
61
51

FIG. 7

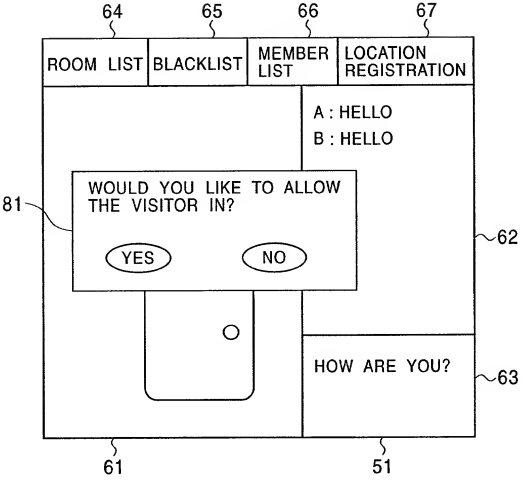

64
65
66
67
ROOM LIST
BLACKLIST
MEMBER LIST
LOCATION REGISTRATION
A : HELLO
B : HELLO
WOULD YOU LIKE TO ALLOW THE VISITOR IN?
YES
NO
81
62
HOW ARE YOU?
63
61
51

FIG. 8

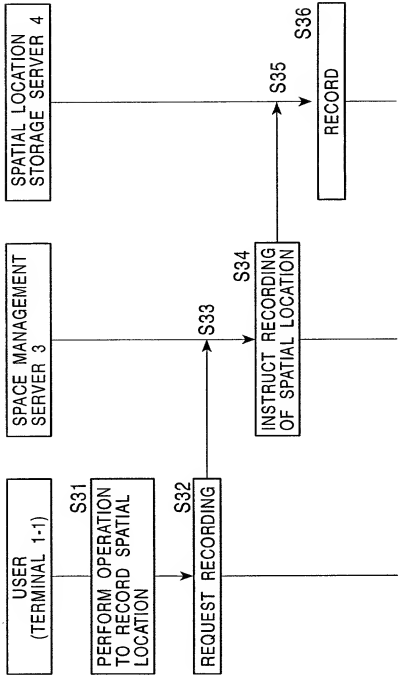

USER (TERMINAL 1-1)
SPACE MANAGEMENT SERVER 3
SPATIAL LOCATION STORAGE SERVER 4
S31
PERFORM OPERATION TO RECORD SPATIAL LOCATION
S32
REQUEST RECORDING
S33
S34
INSTRUCT RECORDING OF SPATIAL LOCATION
S35
S36
RECORD

FIG. 9

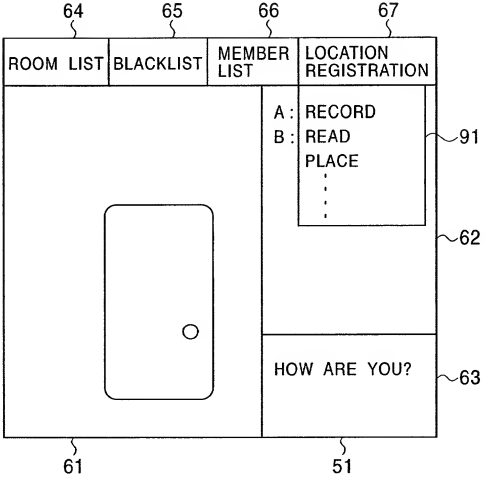

64
65
66
67
ROOM LIST
BLACKLIST
MEMBER LIST
LOCATION REGISTRATION
A : RECORD
B : READ
PLACE
91
62
HOW ARE YOU?
63
61
51

FIG. 10

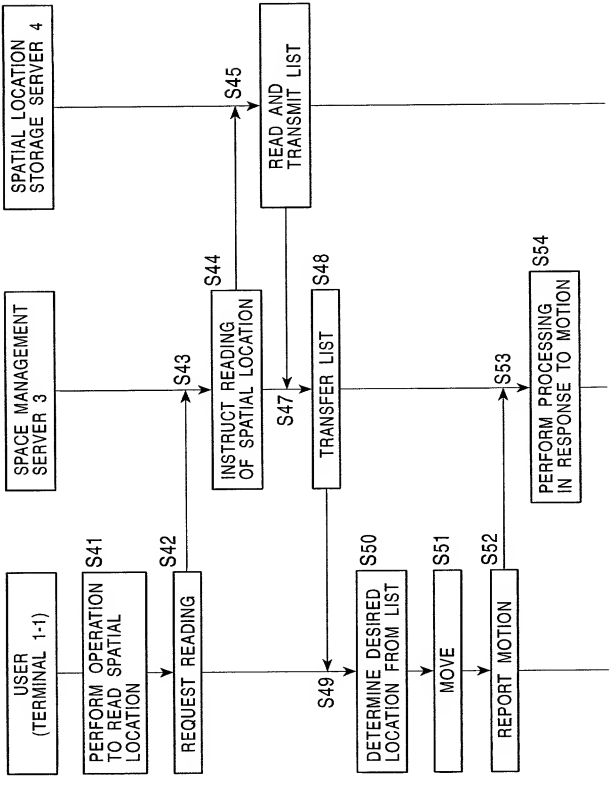

USER (TERMINAL 1-1)
SPACE MANAGEMENT SERVER 3
SPATIAL LOCATION STORAGE SERVER 4
PERFORM OPERATION TO READ SPATIAL LOCATION
S41
REQUEST READING
S42
S43
INSTRUCT READING OF SPATIAL LOCATION
S44
S45
READ AND TRANSMIT LIST
S46
S47
TRANSFER LIST
S48
S49
DETERMINE DESIRED LOCATION FROM LIST
S50
MOVE
S51
REPORT MOTION
S52
S53
PERFORM PROCESSING IN RESPONSE TO MOTION
S54

FIG. 11

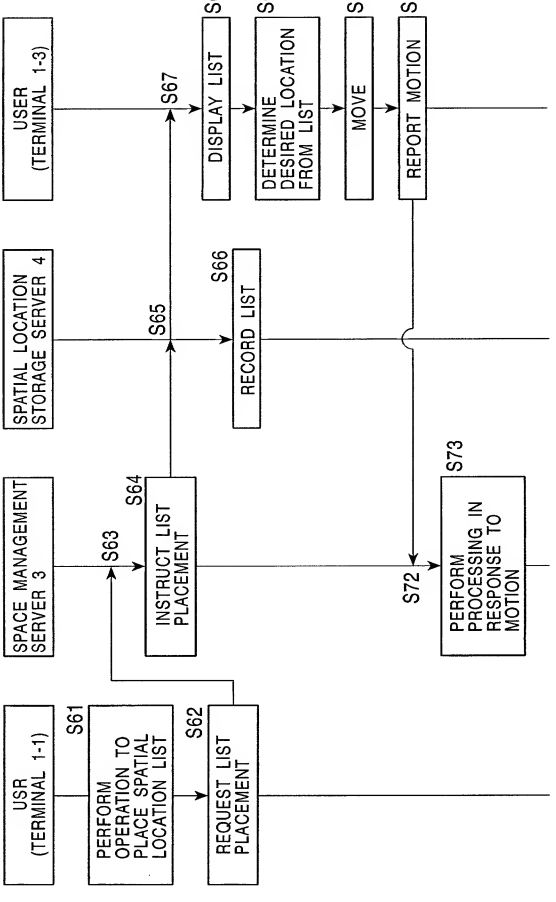
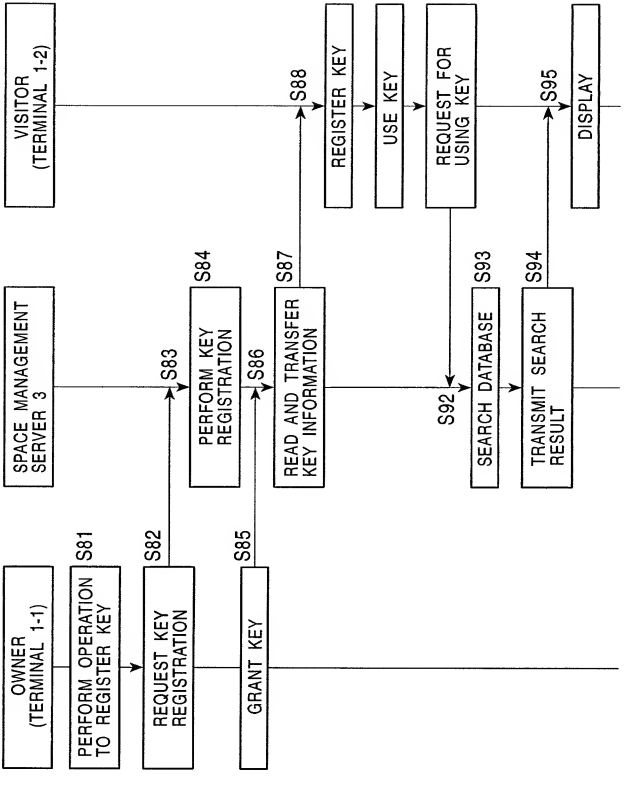

USR (TERMINAL 1-1)
S61
PERFORM OPERATION TO PLACE SPATIAL LOCATION LIST
S62
REQUEST LIST PLACEMENT
SPACE MANAGEMENT SERVER 3
S63
S64
INSTRUCT LIST PLACEMENT
SPATIAL LOCATION STORAGE SERVER 4
S65
S66
RECORD LIST
USER (TERMINAL 1-3)
S67
S68
DISPLAY LIST
S69
DETERMINE DESIRED LOCATION FROM LIST
S70
MOVE
S71
REPORT MOTION
S72
S73
PERFORM PROCESSING IN RESPONSE TO MOTION

FIG. 12


OWNER (TERMINAL 1-1)
PERFORM OPERATION TO REGISTER KEY
REQUEST KEY REGISTRATION
GRANT KEY
SPACE MANAGEMENT SERVER 3
PERFORM KEY REGISTRATION
READ AND TRANSFER KEY INFORMATION
SEARCH DATABASE
TRANSMIT SEARCH RESULT
VISITOR (TERMINAL 1-2)
REGISTER KEY
USE KEY
REQUEST FOR USING KEY
DISPLAY
S81
S82
S83
S84
S85
S86
S87
S88
S89
S90
S91
S92
S93
S94
S95
S96